

Date: Mon, 2 Aug 93 14:44:54 PDT  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #929  
To: Info-Hams

Info-Hams Digest                      Mon, 2 Aug 93                      Volume 93 : Issue 929

Today's Topics:

ARRL BULLETIN 74 ARLB074  
ARRL Letter 7/24/93  
Fixing the books  
FT 470 AA Battery pack  
HELP, PC RADIATES ...QRM  
Kenwood AT-250 Automatic Antenna Tuner.  
Mode B on Phase 3D  
Need explanation of procedure in CW contacts.  
Two Meter Transmitter for Phase 3D  
Yagi matching questions

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

-----  
Date: Mon, 02 Aug 93 04:43:03 GMT  
From: dog.ee.lbl.gov!overload.lbl.gov!agate!usenet.ins.cwru.edu!magnus.acs.ohio-  
state.edu!cis.ohio-state.edu!mstar!n8emr!bulletin@network.ucsd.edu  
Subject: ARRL BULLETIN 74 ARLB074  
To: info-hams@ucsd.edu

=====  
| Automatic relayed from packet radio via |  
| N8EMR's Ham BBS, 614-895-2553 |  
=====

ZCZC AG16  
QST DE W1AW

ARRL BULLETIN 74 ARLB074  
FROM ARRL HEADQUARTERS  
NEWINGTON CT JULY 9, 1993  
TO ALL RADIO AMATEURS

SB QST ARL ARLB074  
ARLB074 MESSAGE CONTENT PROPOSAL

#### MESSAGE CONTENT PROPOSAL

THE ARRL HAD FILED COMMENTS WITH THE FCC ON THEIR PROPOSAL TO DEFINE THE RESPONSIBILITY FOR THE CONTENT OF AMATEUR MESSAGES RELAYED BY HIGH-SPEED NETWORKS.

THE FCC'S PROPOSAL, IN PR DOCKET 93-85, WAS IN RESPONSE TO A NUMBER OF PETITIONS FOR RULE MAKING, AND WOULD ESTABLISH ''A COMPLIANCE POLICY FOR AMATEUR STATIONS PARTICIPATING IN AUTOMATIC MESSAGE FORWARDING SYSTEMS, TO HOLD THE LICENSEE OF THE STATION ORIGINATING A MESSAGE AND THE LICENSEE OF THE FIRST FORWARDING STATION PRIMARILY\_ ACCOUNTABLE FOR VIOLATIVE COMMUNICATIONS.''

THE PETITIONS WERE FILED FOLLOWING AN INCIDENT IN EARLY 1991, WHEN THE OPERATORS OF SEVERAL AMATEUR PACKET BULLETIN BOARDS WERE CITED BY THE COMMISSION FOR FORWARDING WHAT WAS CHARACTERIZED AS A ''COMMERCIAL'' MESSAGE.

THE PROPOSAL WOULD MODIFY CURRENT FCC RULES, WHICH PROVIDE ACCOUNTABILITY OF EACH LICENSEE FOR EVERY TRANSMISSION FROM THE LICENSEE'S STATION, REGARDLESS OF THE CONFIGURATION OF THE SYSTEM OF STATIONS IN A DATA NETWORK OR WHETHER THE STATION IS IN REPEATER OPERATION.

THE LEAGUE SUGGESTED THAT SOME FINE TUNING OF THE DEFINITIONS OF THE TERMS ''ORIGINATOR'' AND ''FIRST FORWARDER'' WAS NEEDED.

MORE INFORMATION IS IN QST FOR MAY 1993, PAGE 88.  
NNNN

-----  
Date: Mon, 2 Aug 1993 14:08:48 GMT  
From: swrinde!cs.utexas.edu!wupost!ukma!rsg1.er.usgs.gov!dgg.cr.usgs.gov!  
bodoh@network.ucsd.edu  
Subject: ARRL Letter 7/24/93  
To: info-hams@ucsd.edu

In article <\$arll724@ampr.org>, marcbg@feenix.metronet.com (Marc Grant) writes:  
|>

```

|> The ARRL Letter
|>
|> Vol. 12, No. 14
|>
|> July 24, 1993
|>...
|> VEC'S PETITION TO FCC SEEKS
|>
|> "INSTANT OPERATING" RIGHTS
|>
|> A petition by the Western Carolina Amateur Radio
|> Society (WCARS) VEC of Knoxville, Tennessee, asks the FCC to
|> change its rules to allow amateur privileges to people
|> awaiting their first license (and call sign) from the
|> Commission.
|>...
|> The FCC, in denying the Hambrecht petition, said
|> that while application processing times had been long (on
|> the order of two months) when the petition was made, it had
|> been reduced to a matter of weeks and was therefore not
|> excessive.
|>
--

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Yup - it's been cut from two months down to 8 weeks! I have been watching the time it takes and the overwhelming majority is 8-9 weeks with some taking 12 weeks. They - of course - are referring to the time the FCC munches on it, but they should be considering the average time of test to receipt of license...

```

+++++
+ Tom Bodoh - Sr. systems software engineer, Hughes STX, NOY?? (in the mail) +
+ USGS/EROS Data Center, Sioux Falls, SD, USA 57198 (605) 594-6830 +
+ Internet; bodoh@dgg.cr.usgs.gov (152.61.192.66)

```

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+
+ "Welcome back my friends to the show that never ends!" EL&P
+

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+++++

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Date: Sun, 1 Aug 1993 20:32:08 GMT  
From: dog.ee.lbl.gov!overload.lbl.gov!agate!spool.mu.edu!darwin.sura.net!  
perot.mtsu.edu!raider!theporch!jackatak!root@network.ucsd.edu  
Subject: Fixing the books  
To: info-hams@ucsd.edu

levin@bbn.com (Joel B Levin) writes:



release more hydrogen gas than standard batteries because they have an "emergency" gas vent (which standard batteries don't) which is a good, but not perfect, seal.

Also, nominal voltage for standard NiCads is 1.20V. I wouldn't worry about the "overvoltage" even if they were 1.25V cells (which I haven't heard of); try measuring the output of a standard NiCad pack just after a full charging and you'll probably find it's more like 8.4V. NiCads seem to charge to 1.4V/cell and, when loaded, discharge "rapidly" to the 1.2V area, staying around there for a good portion of the usable charge lifetime. (These statements are all approximate, so don't expect to see exact measurements corroborating what I said.)

If you're worried, drill a small hole in the bottom of the pack. But I understand that lots of people do use these packs with NiCads without trouble.

Your biggest trouble could occur if you accidentally short the output of the pack; if it's sufficiently sealed, the rapid venting of H2 gas from the batteries could build enough pressure to make the pack explode. (Unlikely but possible.)

--

```
+-----+
|  Cliff Sharp  |      clifto@indep1.chi.il.us   OR  clifto@indep1.uucp   |
|    WA9PDM    |                        Use whichever one works          |
+-----+
```

-----  
Date: Sun, 1 Aug 1993 22:31:19 EST  
From: anomaly.sbs.com!kd1nr!system@uunet.uu.net  
Subject: HELP, PC RADIATES ...QRM  
To: info-hams@ucsd.edu

dihi@bsdih1.atr.bso.nl (Dick Hissink) writes:

```
> The combination of the PC and the radio equipment opens new doors of
> possibilities... But what happens as soon as I switch on my PC? I get
> a hell of a lot of QRM on almost every band!
>
> The main source is the monitor, but also the PC unit itself causes radiation.
> I did some experiments with Ferrite clamps around all the in- and outgoing
> cabling, but without a real satisfying result.
>
> Probably more of us have been struggling with radiating PC's, and I wonder
> if somebody has THE answer, or maybe some tips what to do.
```

Actually, I'd be interested in seeing how to resolve this problem in an easy way. I know, I know.. .ground the equipmnet but what do you do with a computer monitor that has virtually NO metal in it?

I've noticed VGA monitors tend to completely trash 20m and my XT tends to trash certain parts of 2m when it's doing intensive disk i/o.

Grrrrr.... conflicting technologies!

Tony

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-----
      o      o  Tony Pelliccio, KD1NR, Control Op 441.750+, ARRL VE
      \      /  system @ garlic.sbs.com                      Soon W5YI VE
       \____/
        (oo)  Cow humor. Sort of like the Far Side.
       /|____\|
      / | {MTV} ||  MooTV - Rockin' Bumpin' and Funkin' into the 90's
 *  || {____} ||
    ||-----||  (And people thought my last .sig was long, ha!)
    ^^      ^^
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```

-----  
Date: 2 Aug 93 16:22:25 GMT  
From: sdd.hp.com!col.hp.com!gregt@hplabs.hpl.hp.com  
Subject: Kenwood AT-250 Automatic Antenna Tuner.  
To: info-hams@ucsd.edu

Mohan Pakkurti (mohan@tulip) wrote:

: it correctly. Actually I tried to tune up my ts-520s yesterday and somehow  
: =====  
: manages to increase the swr to more than 3:1.  
  
: I now have dipoles for the 40m, 20m, 15m and 10m and eagerly waiting for  
: =====  
: license.  
: =====

Sounds like flame bait to me!

You failed to mention that you only tried this setup into a dummy load.  
I'll assume that was what you did since almost anything else would be  
illegal and would incur the wrath of the net!

Advice: Wait until your license comes! In the meantime, join your local  
radio club and ask for help there. Maybe one of the guys could  
stop by and show how to use it.

Greg

```

=====
Greg Tarcza      WA200D
Hewlett-Packard Company      Pikes
P.O. Box 2197      Peak
Colorado Springs, CO 80901    Soaring
719-590-2471      Society
gregt@col.hp.com
=====

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```

-----

Date: 2 Aug 93 15:52:56 GMT
From: psinntp!arrrl.org@uunet.uu.net
Subject: Mode B on Phase 3D
To: info-hams@ucsd.edu

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SB SPACE @ ARL $ARLS046
ARLS046 MODE B FOR PHASE 3D

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ZCZC AS26
QST de W1AW
Space Bulletin 046 ARLS046

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Date: Fri, 30 Jul 1993 18:05:08 GMT
From: pipex!bnr.co.uk!corpgate!nrtpa038!bnr.ca!harp@uunet.uu.net
Subject: Need explanation of procedure in CW contacts.
To: info-hams@ucsd.edu

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In article <etxtsg.744029082@solsta-c> etxtsg@solsta.ericsson.se (Thomas
Grennefors TX/DKF) writes:
>From: etxtsg@solsta.ericsson.se (Thomas Grennefors TX/DKF)
>Subject: Need explanation of procedure in CW contacts.
>Date: Fri, 30 Jul 1993 10:44:42 GMT
>I am in the procedure of learning CW to get my HF proviliges.
>I have now gotten so far that i started to listen to QS0:s in
>the ham bands. But somtimes i hear the following.
>= UR RST is 599/5NN =
>What in the heck does that 5NN means.
>
>I must say that i wiched i lived in america where the lowes CW speed
>to get a licence is 5 wpm. Here in sweden it's 8 wpm. If it would have
>been 5 wpm i would be on HF by now. I hit a plateu at 6 wpm and held there
>for 2 months, but now im close to 11 wpm. The application for testing

```

>is in the mail. So now im starting to get interested in operational  
 >procedures. Are there anything else one should think of when having a  
 >CW contact? Any hinbts are welcome.  
 >  
 >  
 >  
 >  
 >--  
 >  
 >Thomas Grennefors, SM4UUA ! What is the airspeed velocity of an unladen swallow?  
 >Ericsson Telecom,Karlstad ! What do you mean, an African or a European swallow?  
 >etxtsg@solsta.ericsson.se ! Well...I don't know...AAAAARRRRRRRRRRRRRRGGGGGHHHH!!!

5NN is the same as 599. 9s are very long to send so often when it is  
 obvious what we mean we use N.

For similar reasons T is often substituted for 0. A is substituted for 1.

I hope this helps.

```
*****
* Danny Stone (WB4ETY)          Bell-Northern Research      *
* "A Professional Grouch"      Research Triangle Park, NC *
* Alias "Mr. Pathos"                                *
*                               *
* Don't Blame Me - Blame the Testosterone...              *
* My Damn Opinions Are My Own!                            *
*****
```

-----

Date: 2 Aug 93 02:34:01 GMT  
 From: news-mail-gateway@ucsd.edu  
 Subject: Two Meter Transmitter for Phase 3D  
 To: info-hams@ucsd.edu

SB SAT @ AMSAT \$ANS-213.01  
 TWO-METER TRANSMITTER FOR PHASE 3D

HR AMSAT NEWS SERVICE BULLETIN 213.01 FROM AMSAT HQ  
 SILVER SPRING, MD AUGUST 1, 1993  
 TO ALL RADIO AMATEURS BT  
 BID: \$ANS-213.01  
 2m Transmitter Announcement  
 AMSAT-UK MEMBER TO BUILD 2M TRANSMITTER FOR PHASE 3D

In a joint statement issued at the recently completed AMSAT-UK



Colloquium, Ron Broadbent, G3AAJ, Honorary Secretary of AMSAT-UK, and Ray Soifer, W2RS, Executive Vice President of AMSAT-NA, announced that a 2-meter downlink transmitter for the Phase 3D satellite is to be designed and built by Mike Dorsett, G6GEJ, as part of the international Phase 3D project team. Mike, who met with project leaders including Karl Meinzer, DJ4ZC, and Dick Jansson, WD4FAB, last week in Marburg, Germany, to discuss technical details, described his proposed design at the Colloquium, held at the University of Surrey on July 29 to August 1, 1993.

Together with the 70cm uplink receiver already planned, this means that there will, indeed, be a Mode UV capability (formerly known as Mode B) on the new satellite. If all goes as expected, users of Mode B on AO-13 can look forward to improved performance from Phase 3D.

As soon as the need for a qualified builder became known some months ago, AMSAT-UK and AMSAT-NA worked closely together to identify and screen prospective candidates. Mike Dorsett, G6GEJ, is a well-known designer of high performance VHF/UHF equipment. He is a longtime member of AMSAT-UK and is doing this work strictly on a volunteer basis. Mike's strong technical background will be a welcome addition to the international Phase 3D project team.

/EX

-----  
Date: 29 Jul 93 20:58:03 GMT  
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!math.ohio-state.edu!cs.utexas.edu!asuvax!ncar!noao!CS.Arizona.EDU!naucse!nauvax.ucc.nau.edu!cvm@network.ucsd.edu  
Subject: Yagi matching questions  
To: info-hams@ucsd.edu

I have been given a homemade 5 element Yagi for 2 meters. Mechanically it is very well constructed. It has a gamma match on it now and the SWR is way too high, I am going to attempt to fix the match on it but I have several questions. I have input the dimensions of the antenna into the YAGIMAX program and it says that the driven element resistance is 17.32 ohms and the reactance is +12.61 ohms. Are these values reasonable to try to match the antenna to roughly 50 ohms?

YAGIMAX came with two matching programs, one for the gamma match and one for the hairpin. I think I understand how to connect the gamma match, but I don't remember how to connect the hairpin match (the copy of the antenna hand book I borrowed has been recalled by the owner). Could someone please describe the hairpin match?

Also, the hairpin matching program says that it assumes the reactive component of the impedance is negative, but the reactive component of the antenna is positive. Can I use a hairpin match on this antenna? If so, how can I determine that length of the hairpin rod?

When I run the gamma match program I get a value of 8.33 pF for the gamma capacitor. The only immediate source of capacitors I have is Radio Shack. The capacitors are rated in terms of xxWVDC. What does this rating mean? The only 8 pF caps they have are rated 50WVDC. Will this handle 50 watts from my transmitter?

And the final question, I really don't understand reactance. Could someone please explain it and how the antenna has a reactive and resistive component?

Thanks in advance for any help you can give me.

-- Chris

-----  
Chris Michels -- Systems Programmer                   cvm@nauvax.ucc.nau.edu  
Northern Arizona University -- Flagstaff, AZ       cvm@nauvax.bitnet  
Phone: (602) 523-6495

-----  
Date: Thu, 29 Jul 1993 16:04:45 GMT  
From: elroy.jpl.nasa.gov!usc!howland.reston.ans.net!vixen.cso.uiuc.edu!  
newsrelay.iastate.edu!news.iastate.edu!IASTATE.EDU!wjturner@ames.arpa  
To: info-hams@ucsd.edu

References <CAvvEw.7J@fc.hp.com>, <CAw19r.3sD@news.iastate.edu>,  
<CAxJ11.HDJ@fc.hp.com>DU  
Reply-To : wjturner@IASTATE.EDU (William J Turner)  
Subject : Re: -.-. .-- -. . .-- ...

In article <CAxJ11.HDJ@fc.hp.com>, jayk@fc.hp.com (Jay Kesterson K0GU) writes:

> I don't consider: NORDV de K0GU SK to be incorrect. Why would you say  
> your key is silent before it is. The intent of the SK is not the first  
> part of "Shave and a haircut". I long ago started sending just . . for that.  
> But I'm probably violating somebodys operating manual procedure. But in  
> this case it seems most everyone else does too.....

True, many hams do it. Last night, I was reminded by an OT I QSOed with, that not everyone does, though. If you pay attention, most of the OTs (calls with K#XXX or W#XXX, possibly also WX#XXX) do send it before the ID.

I agree SK is no the same intent as "Shave and a haircut", but it also does

\*not\* mean "Silent Key". As someone posted a few months ago, SK is actually a modified 30 using the American Morse (didididadit daaaaah) which is one of the old telegrapher's codes (which 73 and 88 come from) for "end of communication" (or something close). It means that you have said everything you are going to to that station, and are moving on to something else. It is seen today (as 30) in the articles reporters write for newspapers, where they end with a 30 so that the home office (or whoever) knows they are at the end of the article.

I think CL would come closer to your "key is silent". It means you are closing the station. It, by the way, is technically the only thing you send after the final ID, "shave and a haircut" not being an official prosign.

--

|                           |   |
|---------------------------|---|
| Will Turner, NORDV        | -----                                       |
| wjturner@iastate.edu      | "Are you going to have any professionalism, |
| twp77@isuvax.iastate.edu  | or am I going to have to beat it into you?" |
| TURNERW@vaxld.ameslab.gov | -----                                       |

-----

Date: (null)  
From: (null)  
SB SPACE ARL ARLS046  
ARLS046 MODE B FOR PHASE 3D

In a joint statement issued at the AMSAT-UK Colloquium, Ron Broadbent, G3AAJ, Honorary Secretary of AMSAT-UK, and Ray Soifer, W2RS, Executive Vice President of AMSAT-NA, announced that a 2-meter downlink transmitter for the Phase 3D satellite will be designed and built by Mike Dorsett, G6GEJ, as part of the international Phase 3D project team. Mike met with project leaders including Karl Meinzer, DJ4ZC, and Dick Jansson, WD4FAB, last week in Marburg, Germany, to discuss technical details. He also described his proposed design at the Colloquium, held at the University of Surrey on July 29 to August 1, 1993.

Together with the 70-cm uplink receiver already planned, this means that there will indeed be a Mode ''UV'' (formerly known as Mode B) capability on the new satellite. If all goes as expected, users of Mode B on OSCAR 13 can look forward to improved performance from Phase 3D.

G6GEJ is a well-known designer of high-performance VHF/UHF equipment. He is a long-time member of AMSAT-UK and his doing this work strictly on a volunteer basis.

Our thanks to Keith Baker, KB1SF, of AMSAT-NA for providing this

information.

NNNN

-----  
Date: Thu, 29 Jul 1993 19:34:45 GMT  
From: news.Hawaii.Edu!uhunix3.uhcc.Hawaii.Edu!jherman@ames.arpa  
To: info-hams@ucsd.edu

References <CAw19r.3sD@news.iastate.edu>,  
<1993Jul28.233437.2614@TorreyPinesCA.ncr.com>,  
<238kcc\$18n@news.acns.nwu.edu>jherman  
Subject : Re: CW Prosigs (was: -.. ..- -- -...)

In article <238kcc\$18n@news.acns.nwu.edu> rdewan@casbah.acns.nwu.edu (Rajiv Dewan) writes:

>In article <1993Jul28.233437.2614@TorreyPinesCA.ncr.com>  
kevin@TorreyPinesCA.ncr.com (Kevin Sanders) writes:

>>

>>by current usage? I hear a majority of folks sending SK at the end, so that

>

>A source, may be as canonical as it gets, is the ARRL Operating Manual  
>(or the RSGB version of it.).

>

>>

>>OK, a question for all you procedural nuts: when is AR used?

>>

>

>According to the manual (I do not follow this all the time and as long  
>as we are nit-picking...):

>

> QSO STUFF <AR> AA6AA DE AB6BA <K or KN>

>

>and at end of qso

>

> QSO STUFF <AR SK or SK> AA6AA DE AB6BA <K or KN or nothing if no return>

>

>>

>>>There are many procedural calls that are not used correctly. Many hams send  
>>>SK last. Many always send K and never KN (not incorrect, though). And many

Usually the commercial CW procedures and the ham CW procedures coincide; but there is a bit of a difference here concerning the use of SK (the commercial ops call it VA). I was a CW operator for the U.S. Coast Guard; I worked at

their Honolulu Radio Station - callsign NMO. At the completion of either a broadcast (weather, navigation warning, etc.), or QSO with a ship, the last prosign sent would be VA (again, the ham's SK):

For example: <WEATHER BROADCAST> AR DE NMO VA

A ship-to-shore QSO might be a bit less formal:

<QSO> AR DE NMO / NMO DE KNDR R QSL SU VA / KNDR DE NMO TKS VA / EE / EE

(Yes, even the commercial ops send dit dit at the end of their QSO, but notice where it is placed).

I've never heard KN used, though.

Jeff, NH6IL

Jeffrey Herman, University of Hawaii Mathematics, jherman@hawaii.edu

-----  
Date: Fri, 30 Jul 1993 14:10:25 GMT  
From: swrinde!cs.utexas.edu!usc!howland.reston.ans.net!vixen.cso.uiuc.edu!  
newsrelay.iastate.edu!news.iastate.edu!IASTATE.EDU!wjturner@network.ucsd.edu  
To: info-hams@ucsd.edu

References <CAxJ11.HDJ@fc.hp.com>, <1993Jul29.110445@IASTATE.EDU>,  
<1993Jul29.230455.11174@TorreyPinesCA.ncr.com>E.ED  
Reply-To : wjturner@IASTATE.EDU (William J Turner)  
Subject : Re: -. . . -- -. . . -- ...

In article <1993Jul29.230455.11174@TorreyPinesCA.ncr.com>,  
kevin@TorreyPinesCA.ncr.com (Kevin Sanders) writes:  
> In article <1993Jul29.110445@IASTATE.EDU> wjturner@IASTATE.EDU (William J  
Turner) writes:  
> >modified 30 using the American Morse (didididadit daaaaah) which is one of  
the  
> ^^^^^^^^^^^  
> The underscored portion is something I hear quite frequently from the other  
> op just after I turn the freq. over to him. Run together like that, followed  
> by a standard kn6fq de xx6xx OK etc.... It sounds like a prosign, but which  
> one is it? SN? EF? IR? None of these are listed in my prosign table.  
> If it's a telegrapher's code for 3, does 3 have a special meaning?

> I've been wondering about this for a long time.

Hmmm, I don't remember ever hearing it. I usually get a didahdit for R or RECEIVED.

I didn't mean to say didididahdit is the telegrapher's code for 3. It is actually a 3 in the American morse code (the original which was used by railroad telegraphers). What I mean by "telegrapher's code" was the system of numbers that they sent to mean different things. Someone posted a few of them a couple of months ago, and 73 and 88 are left-overs from that. Also SK is a modified 30, and I think some of the other prosigns come from the sameplace. I do have the American Morse code written down somewhere (I think it came from when my grandfather learned his morse code), but I don't know where right off.

--

|                           |   |
|---------------------------|---|
| Will Turner, NORDV        | -----                                       |
| wjturner@iastate.edu      | "Are you going to have any professionalism, |
| twp77@isuvax.iastate.edu  | or am I going to have to beat it into you?" |
| TURNERW@vaxld.ameslab.gov | -----                                       |

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End of Info-Hams Digest V93 #929

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